

CHEILANTHES PURPUSII (ADIANTACEAE),
A NEW SPECIES FROM SAN LUIS POTÓSI, MEXICO

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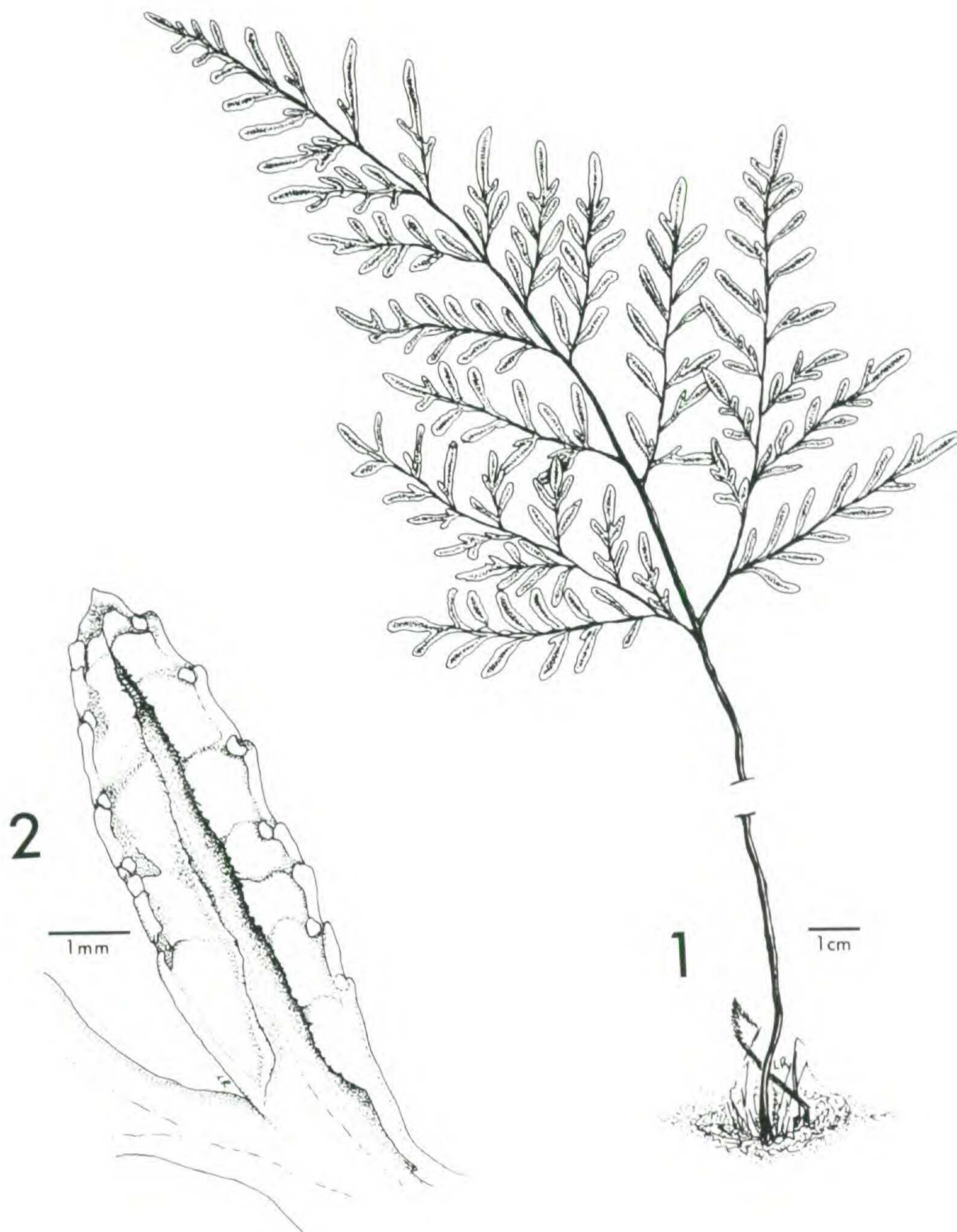
A specimen filed as *Pellaea angustifolia* and bearing the annotation "*Cheilanthes* sp. nov." (GH) proves to be an undescribed species of *Cheilanthes*.

Cheilanthes purpusii T. Reeves, *sp. nov.* Figures 1 and 2.

A *C. hirsuta* Link stipitibus teretibus (non sulcatis) nigris, laminis planis, segmentis ultimis non pendulis, indusiis integris (non ciliatis), ad segmenta fere limitatis differt.

Rhizome short, stout, densely covered with concolorous sclerotic scales, these dark brown to black, linear-lanceolate, 2 to 4 mm long, ca. 0.3 mm wide at base, gradually to abruptly narrowed to elongate apex, falcate, often somewhat sinuous, entire or usually with small, blunt, tooth-like projections in upper $\frac{1}{2}$ to $\frac{1}{4}$, sometimes the outer row of cells dark red-brown, slightly lighter than the dark central cells; stipe terete, glabrous (or with a few narrow deciduous scales like those of the rhizome), dark purple-brown, glossy, twice as long as blade, ca. 14 cm long, rachis deeply sulcate between rounded green wings, glossy, colored like stipe; blade deltoid to pentagonal, 7 to 8 cm long, 6 cm wide, herbaceous, dark green above, paler below, 3 to nearly 4 pinnate, glabrous above, minutely granular, with very few thick trichomes near margin (ca. 1 per 5 segments), pubescent below with minute trichomes (ca. 0.02 to 0.05 mm long), ultimate segments elliptic to oblong, 2 to 8 mm long, 1 to 2 mm wide, cuneate, rounded apically; indusium very conspicuous, highly modified, whitish, 0.3 to 0.5 mm wide, nearly entire with minute (ca. 0.02 mm) granulae or glands (?) which are mostly sessile or sometimes short-stalked, clearly distinct from leaf tissue, membranaceous, continuous around segment, slightly decurrent on axes, opaque, segment margin folded under, impressed with white spots marking vein endings at 1 mm intervals, these along line separating indusium from margin.

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Figures 1 and 2. *Cheilanthes purpusii* T. Reeves, *sp. nov.* 1. Habit. 2. pinule, lower surface. *Purpus 4881*, GH.

HOLOTYPE: Mexico: San Luis Potosi: Minas de San Rafael, *Purpus* 4881 (GH!)

This species is related to *Cheilanthes hirsuta* Link, *C. marginata* HBK., and *C. arizonica* (Maxon) Mickel. It differs from these in its terete rather than sulcate stipe. There are no fracture lines in the stipe as are commonly found in these species and the broken stipes on the specimen are not "clean breaks" but are irregular. The stipes in *C. purpusii* are more slender and darker than in the other species, the rhizome scales are narrower and darker, and none of the others have minute or large trichomes on the under surface of the blade. The long-decurrent, ciliate indusia of *C. hirsuta* and *C. marginata* differ markedly from the very minutely glandular-margined, slightly decurrent indusia of the new species. *Cheilanthes arizonica* also differs in possessing dark red glandular dots on the lower surface of the blade.

Sousa (1969) locates Minas de San Rafael at 22° 13'N, 100° 16'W, placing it east-northeast of Ciudad San Luis Potosi in the southeast central portion of the state.

ACKNOWLEDGMENTS

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LITERATURE CITED

- SOUSA, M. 1969. Las colecciones botánicas de C. A. Purpus en Mexico. Univ. Cal. Publ. Bot. **51**:1-36.

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